III.B.2.N.a.16. SMILAX SPP. - TOXICODENDRON RADICANS VINE-SHRUBLAND ALLIANCE

Greenbrier species - Poison-ivy Vine-Shrubland Alliance

Physiognomic Class	Shrubland (III.)
Physiognomic Subclass	Deciduous shrubland (III.B.)
Physiognomic Group	Cold-deciduous shrubland (III.B.2.)
Physiognomic Subgroup	Natural/Semi-natural (III.B.2.N.)
Formation	Temperate cold-deciduous shrubland (III.B.2.N.a.)

Alliance **SMILAX SPP. - TOXICODENDRON RADICANS VINE-SHRUBLAND ALLIANCE (III.B.2.N.a.16)**

Smilax glauca - Toxicodendron radicans Vine-Shrubland

Whiteleaf Greenbrier - Poison-ivy Vine-Shrubland

CLASSIFICATION CONFIDENCE LEVEL: 2

USFS WETLAND SYSTEM: N/A

RANGE:

Fire Island National Seashore

This association occurs in small patches on secondary dunes of Fire Island.

Globally

Barrier beach systems from the Mid-Atlantic to southern New England.

ENVIRONMENTAL SETTING:

Fire Island National Seashore

This community is shallowly rooted in secondary dunes and receives overwash only during storm surges.

Globally

This community occurs on maritime sand dunes, generally of barrier beach systems, where the vegetation is exposed to salt spray and winds. Very little soil development occurs and the water table is well below one meter in depth.

MOST ABUNDANT SPECIES:

Fire Island National Seashore

Stratum	Species
Herbaceous	*Ammophila breviligulata*
Vine / liana	*Toxicodendron radicans, Smilax glauca, Parthenocissus quinquefolia*

Globally

Stratum	Species
Vine / liana	*Smilax* spp.*, Vitis rotundifolia, Parthenocissus quinquefolia*, and/or *Toxicodendron radicans*

CHARACTERISTIC SPECIES:

Fire Island National Seashore

Toxicodendron radicans, Smilax glauca, Parthenocissus quinquefolia

Globally

Smilax spp.*, Vitis rotundifolia, Parthenocissus quinquefolia*, *Toxicodendron radicans*

VEGETATION DESCRIPTION:

Fire Island National Seashore

This association is a vine-covered maritime sand dune where vine species grow over the sand surface and over short shrubs. Vine species have dense total cover; *Toxicodendron radicans* is the most common vine with *Smilax glauca* locally abundant and *Parthenocissus quinquefolia* present, particularly on the backslope of the primary dune. Short shrubs are common and include *Myrica pensylvanica* and *Rubus flagellaris*, which occur on raised mounds with abundant moss and *Cladonia* spp. The herbaceous layer is often sparse with *Ammophila breviligulata*. Dowhan and Rozsa (1989) note the particular importance of *Toxicodendron radicans* in stabilizing sand on primary dunes.

Globally

This community is best described as vine-covered maritime sand dunes. The dominant species of any single dune may be one of any of a number of vine species such as *Smilax glauca, Smilax rotundifolia, Vitis rotundifolia, Parthenocissus quinquefolia*, or *Toxicodendron radicans*. In some cases, the vines are low-growing and occur directly on the sand surface, but in others, the vegetation has a height of 1 m or more, with vines growing over older stems of the same species, or over other shrubs such as *Myrica pensylvanica*. Diagnostic species are *Smilax glauca, Smilax rotundifolia, Toxicodendron radicans*, and *Parthenocissus quinquefolia*. The vegetation is generally low to the ground (less than half a meter tall) and generally covers 70 to 80% of the surface of the ground, the remainder being exposed sand. This vegetation is not widely described in the literature.

Synonymy**:** Vine dune, Greenbrier thicket (Martin 1959b)

COMMENTS:

Fire Island National Seashore

Globally

Documented from Martha's Vineyard (MA); Fire Island NS (NY); Assateague NS (MD).

States/Provinces:	DE:S?, MA:S?, MD:S?, NY:S?, VA?
OTHER NOTEWORTHY SPECIES:	
CONSERVATION RANK:	G?
DATABASE CODE:	CEGL003886
MAP UNITS:	FIIS plots 41, 24

REFERENCES:

Dowhan and Rozsa (1989)
Martin 1959b